

CHAPTER 31

FLOOD DAMAGE PREVENTION ORDINANCE

11-31-101	Purpose.
11-31-102	Definitions.
11-31-103	General Provisions.
11-31-104	Administration.
11-31-105	Appeal and Variance Procedure.
11-31-106	General Provisions for Flood Hazard Reduction.
11-31-107	Specific Standards.
11-31-108	Floodways.

11-31-101 Purpose.

(1) It is the purpose of this Ordinance to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- (a) To protect human life and health;
- (b) To minimize expenditure of public money for costly flood control projects;
- (c) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (d) To minimize prolonged business interruptions;
- (e) To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- (f) To help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future flood blight areas;
- (g) To insure that potential buyers are notified that property is in an area of special flood hazard; and,
- (h) To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

(2) In order to accomplish its purposes, this Ordinance includes methods and provisions for:

- (a) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;

- (b) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (c) Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- (d) Controlling filling, grading, dredging, and other development which may increase flood damage; and,
- (e) Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

11-31-102 Definitions.

Unless specifically defined below, words or phrases used in this Ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this Ordinance its most reasonable application. Any discrepancies that may arise between these definitions and other definitions contained in this Title shall be resolved in favor of these definitions in interpreting and administering the provisions of this Chapter.

(1) **Appeal** means a request for a review of the Flood Damage Prevention Administrator interpretation of any provisions of this ordinance or a request for a variance.

(2) **Area of Special Flood Hazard** means the land in the one hundred (100) year flood plain.

(3) **Base Flood** means the one hundred (100) year flood.

(4) **Development** means any permanent man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations located within the area of special flood hazard.

(5) **Existing Manufactured Home Park or Manufactured Home Subdivision** means a manufactured home park for which the construction of facilities for servicing the lot on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed before the effective date of this Ordinance.

(6) **Expansion to an Existing Manufactured Home Park or Subdivision** means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete or the construction of streets).

(7) **Flood or Flooding** means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (a) The overflow of inland or tidal waters; and/or,

- (b) The unusual and rapid accumulation or runoff of surface waters from any source; and/or
- (c) Debris flows (or mud flows) which are proximately caused by flooding as defined in paragraph (b) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

(8) **Flood, 100 Year** means a flood having a one percent (1%) chance of being equalled or exceeded in any given year.

(9) **Flood Insurance Rate Map (FIRM)** means the official map on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

(10) **Flood Insurance Study** means the official report provided by the Federal Emergency Management Agency that includes flood profiles, the Flood Boundary-Floodway Map, and the water surface elevation of the base flood.

(11) **Flood Plain, 100 year**, means that area adjacent to a drainage channel which may be inundated by a cumulative increase in water surface elevation over one foot as a result of a one hundred (100) year flood.

(12) **Floodproof or Floodproofing** means any combination of structural and nonstructural additions, changes, or adjustments to properties and structures which reduce or eliminate flood damage to land, water and sewer facilities, structures and contents of buildings.

(13) **Floodway** means the channel of a river or other water course and those portions of the adjoining floodplain required to provide for the passage of the one hundred (100) year flood without cumulatively increasing the water surface elevation more than one (1) foot.

(14) **Hydrodynamic Loads** means forces imposed on structures by flood waters due to the impact of moving water on the upstream side of the structure, drag along its sides, and eddies or negative pressures on its downstream side.

(15) **Hydrostatic Loads** means loads or pressures resulting from the static mass of water at any point of floodwater contact with a structure. They are equal in all directions and always act perpendicular to the surface on which they are applied.

(16) **Lowest floor** means the lowest floor of the enclosed area of a structure (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

(17) **Manufactured Home** means a structure that is transportable in one or more sections, built on a permanent chassis, and designed to be used with or without a permanent foundation when connected to the required utilities. The term "manufactured home" does not include recreational vehicles or travel trailers.

(18) **New Construction** means structures for which the "start of construction" commenced on or after the effective date of the original ordinance, and includes any subsequent improvement to such structures.

(19) **New Manufactured Home Park or Subdivision** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed on or after the effective date of these flood plain management regulations.

(20) **Recreational Vehicle** means a vehicle which is (1) built on a single chassis; (2) four hundred (400) square feet or less when measured at the largest horizontal projections; (3) designed to be self-propelled or permanently towable by a light duty truck; and (4) designed primarily not for use a permanent dwelling, but as temporary living quarters for recreational, camping, travel, or seasonal use.

(21) **Start of Construction** includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within one hundred eighty (180) days of the permit date. The "actual start" means the first placement of permanent construction of a structure of a site, such as the pouring of a slab or footings, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footing, piers, or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

(22) **Structure** means a walled and roofed building or a manufactured home that is principally above ground. For the purpose of administering the provisions of this Chapter, roofed but unwall buildings and construction that is supported by an open framework, such as signs, bridges, or certain types of amusement rides, are not considered "structures".

(23) **Substantial Damage** means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed fifty percent (50%) of the market value of the structure before the damage occurred.

(24) **Substantial Improvement** means any reconstruction, addition, or other improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either:

- (a) Any project for improvement of a structure to correct existing violations of State or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
- (b) Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure".

(25) **Variance** means a grant of relief from the requirements of this Ordinance which permits construction in a manner that would otherwise be prohibited by this Ordinance.

11-31-103 General Provisions.

(1) **Lands to Which This Ordinance Applies:** This Ordinance shall apply to all areas of special flood hazards within the jurisdiction of Farmington City.

(2) **Basis for Establishing the Area of Special Flood Hazard:** The areas of special flood hazard identified by the Federal Emergency Management Agency in a scientific and engineering report entitled "The Flood Insurance Study for the City of Farmington, Utah, Davis County", dated February 17, 1981, with accompanying Flood Insurance Rate Maps (FIRM), and any revision thereto resulting from independent site-specific engineering analysis or, after resolution of any post revision protest, from revisions generated by FEMA, is hereby adopted by reference and declared to be a part of this Ordinance. The Flood Insurance Study is on file at the Farmington City Offices located 130 North Main Street in Farmington, Utah.

(3) **Compliance Required:** No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this Ordinance and other applicable regulations.

(4) **Abrogation and Greater Restrictions:** This Ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Ordinance and other ordinance, easement, covenant, or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

(5) **Interpretation:** In the interpretation and application of this Ordinance, all provisions shall be considered as minimum requirements, shall be liberally construed in favor of the governing body, and shall be deemed neither to limit nor repeal any other powers granted under state statutes.

(6) **Warning and Disclaimer or Liability:** The degree of flood protection required by this Ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This Ordinance does not imply that land outside the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This Ordinance shall not create liability on the part of Farmington City, any officer or employee thereof or the Federal Emergency Management Agency, for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.

11-31-104 Administration.

(1) **Establishment of Development Permit:** A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 11-31-103(2). Application for a development permit shall be made on forms furnished by the City and may include, but not be limited to; plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities; and the location of the foregoing. Review of the development permit may be combined with, and become a part of, the normal review and processing of conditional use, site development, and/or subdivision applications if applicable. Specifically, the following information is required:

- (a) Elevation in relation to mean sea level, of the lowest floor of all structures;
- (b) Elevation in relation to mean sea level to which any structure has been floodproofed;

- (c) Certification by a registered professional engineer that the floodproofing methods for any nonresidential structure meet the floodproofing criteria of this Chapter; and,
- (d) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

(2) **Designation of the Flood Damage Prevention Administrator (hereafter "Administrator"):** The Zoning Administrator is hereby appointed to administer and implement this Ordinance by granting or denying development permit applications in accordance with its provisions.

(3) **Duties and Responsibilities of the Administrator:** Duties of the Administrator shall include, but are not limited to:

- (a) Review of all development permits to determine that the permit requirements of this ordinance have been satisfied.
- (b) Review of all development permits to determine that all necessary permits have been obtained from those Federal, State, or local governmental agencies from which prior approval is required.
- (c) Review of all development permits to determine that the proposed development is not located in the floodway. Except as provided herein, no development shall be permitted within a floodway.
- (d) When base flood elevation data has not been provided, the Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from any Federal, State, or other source, as criteria for requiring that new construction, substantial improvements, or other development in Zone A are administered in accordance with this Chapter.
- (e) Obtain and record the actual elevation (in relation to mean sea level) of the lowest floor of all new or substantially improved structures, and whether or not the structure contains a basement.
- (f) For all new substantially improved floodproofed structures verify and record the actual elevation (in relation to mean sea level) to which the structure has been floodproofed and maintain the floodproofing certifications required by this Chapter.
- (g) Maintain for public inspections all records pertaining to the provisions of this Ordinance.
- (h) Notify any adjacent communities, the Utah State Division of Water Rights, and Utah State Division of Water Resources prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- (i) Ensure that the flood-carrying capacity is not diminished as a result of any alteration or relocation of any portion of a watercourse.

- (j) Make interpretations where needed, after consultation with the City Engineer, as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided below.

11-31-105 Appeal and Variance Procedure.

(1) The Board of Adjustment as established by Farmington City shall hear and decide requests for variances from the requirements of this Ordinance and appeals when it is alleged there is error in any requirement, decision, or determination made by the Administrator in the enforcement or administration of this Ordinance.

(2) The applicant, or any other interested person, firm, or corporation, shall file the appeal or request for variance within thirty (30) days after the final determination of the Administrator. The applicant or any other interested party shall have the right to a full hearing before the Board of Adjustment on the question of whether or not the proposed development will in any way impair, restrict, or obstruct the flow of the natural, storm, or runoff waters that usually course down the natural waterway, stream, or ravine in question. After hearing the appeal, the Board may reverse or affirm, wholly or in part, or may modify the requirement, decision, or determination appealed from.

(3) Those aggrieved by the decision of the Board of Adjustment, or any taxpayer, may appeal such decision to the Second Judicial District Court, Davis County, Utah, as provided by law.

(4) In passing upon such applications, the Board of Adjustment shall consider all technical evaluations, all relevant factors, standards specified in other sections of this Ordinance, and:

- (a) the danger that materials may be swept onto other lands to the injury of others;
- (b) the danger to life and property due to flooding or erosion damage;
- (c) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (d) the importance of the services provided by the proposed facility to the community;
- (e) the necessity to the facility of a waterfront location, where applicable;
- (f) the availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
- (g) the compatibility of the proposed use with existing and anticipated development;
- (h) the relationship of the proposed use to the comprehensive plan and flood plain management program of that area;

- (i) the safety of access to the property in times of flood for ordinary and emergency vehicles;
- (j) the expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
- (k) the costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

(5) Upon the consideration of the factors of this section and the purposes of this Ordinance, the Board of Adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Ordinance. The Administrator shall maintain the records of all appeal actions, including technical information, and report any variances to the Federal Emergency Management Agency upon request.

(6) Conditions for Variances:

- (a) Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half (1/2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood elevation, providing items above have been fully considered. As the lot size increases beyond the one-half (1/2) acre, the technical justification required for issuing the variance increases.
- (b) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places, without regard to the procedures set forth in the remainder of this section.
- (c) Variances shall not be issued within a designated floodway if any increase in upstream flood levels, or loss of flood plain storage that impacts downstream flood levels during the base flood discharge, would result.
- (d) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief. Variances shall only be issued upon a showing of good and sufficient cause, a determination that failure to grant the variance would result in exceptional hardship to the applicant, and a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, or conflict with existing local laws or ordinances.
- (e) All variances shall include a condition that the applicant sign an assumption of risk and waiver of liability agreement, in a form acceptable to the City Attorney, absolving the City of any and all liability in the event flood damage occurs to that portion of a structure for which the variance is granted. This agreement shall be recorded in the office of the Davis County Recorder, shall run with the land, and shall be binding upon all future owners thereof.

(7) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

11-31-106 General Provisions for Flood Hazard Reduction.

In all areas of special flood hazards the following general standards are required:

- (1) Anchoring:
 - (a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure and shall be capable of resisting the hydrostatic and hydrodynamic loads.
 - (b) All manufactured homes shall be elevated and anchored to resist flotation, collapse, or lateral movement and shall be capable of resisting the hydrostatic and hydrodynamic loads. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting one hundred mile per hour (100 mph) wind forces.
- (2) Construction Materials and Methods:
 - (a) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - (b) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
 - (c) All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment and other service facilities that are designed and/or located so as to prevent inundation during conditions of flooding or shall be floodproofed to resist inundation.
- (3) Utilities:
 - (a) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
 - (b) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters.
 - (c) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- (4) Subdivision Proposals:
 - (a) All subdivision proposals shall be consistent with the need to minimize flood damage.

- (b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage.
- (c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and,
- (d) Base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least fifty (50) lots or five (5) acres (whichever is less).

11-31-107 Specific Standards.

In all areas of special flood hazard where base flood elevation data has been provided as set forth in this Chapter, the following standards are required:

(1) **Residential Construction:** New construction and substantial improvement of any residential structure shall have the lowest floor elevated to or above base flood elevation.

(2) **Non-Residential Construction:** New construction and substantial improvement of any commercial, industrial, or other non-residential structure shall either have the lowest floor elevated to the level of the base flood elevation or, together with the attendant utility and sanitary facilities, shall;

- (a) be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water;
- (b) have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
- (c) be certified by a registered professional engineer that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this paragraph. Such certifications shall be provided to the Administrator as set forth herein.

(3) **Openings in Enclosures Below the Lowest Floor:** For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or must meet or exceed the following minimum criteria:

- (a) A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided;
- (b) The bottom of all openings shall be no higher than one (1) foot above grade;
- (c) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of flood waters.

(4) **Manufactured Homes:**

- (a) Manufactured homes shall be anchored as provided herein.
- (b) All manufactured homes or those to be substantially improved shall conform to the following requirements:
 - (i) Manufactured homes that are placed or substantially improved on a site, outside of a manufactured subdivision, in a new manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or in an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood, shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement.
 - (ii) Manufactured homes to be placed or substantially improved on sites in existing manufactured home parks or subdivisions that are not subject to the provisions in (i) above shall be elevated so that either the lowest floor of the manufactured home is at or above the base flood elevation, or the manufactured home chassis is supported by reinforced piers or other foundation elements that are no less than thirty-six (36) inches in height above grade and shall be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

(5) **Recreational Vehicles:** Recreational vehicles shall be fully licensed and ready for highway use, be on the site for fewer than one hundred eighty (180) consecutive days, or meet the permit requirements and elevation and anchoring requirements for resisting wind forces. This provision shall apply to all recreational vehicles except for those which are kept at private residences and which are located so as to resist flotation.

11-31-108 Floodways.

Located within areas of special flood hazard established in Section 11-31-103(2) are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, encroachments, including fill, new construction, substantial improvements, or other development shall not be permitted except that bridges, culverts, or other public improvements, which comply with the provisions of this Chapter, may be allowed with site development approval.